

Remarks/Arguments

Claim Summary

Claims 1-13 are pending in the application.

Claim Rejections - 35 USC § 102

Claims 1-2 were rejected under 35 U.S.C. §102(b) as being anticipated by Hama et al., US Patent 5,792,261.

A claim is anticipated “if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). See also MPEP 2131. If the cited reference fails to either expressly or inherently describe *each and every limitation* of a claim, then the cited reference does not anticipate the claim.

The Examiner alleges on page 2 of the “Detailed Action” that Hama et al discloses:

“a segregation wall part 14 having a portion made of quartz ceramic [*sic*] material opposite to the etch chamber that is a ceiling wall of the etch chamber, and having a portion made of quartz material opposite to the plasma chamber...”

Claim 1 of the present application recites in part, “a segregation wall part having a portion made of **ceramic material** opposite to the etch chamber, and having a portion made of **quartz material** opposite to the plasma chamber.” Hama et al. discloses a “partitioned plate 14 made of [a single]

dielectric material such as quartz.” Column 3, line 66. In other words, Hama et al. only discloses the use of a quartz partitioned plate 14, similar to the apparatus disclosed by the Applicants in the Background section of the present application on page 1, paragraph [0020].

Hama et al. fails to teach an inductive coupling plasma etching apparatus having “a segregation wall part having a portion made of ceramic material opposite to the etch chamber, and having a portion made of quartz material opposite to the plasma chamber;” therefore, claim 1 and claim 2, which depend on base claim 1, define over Hama et al.

Claims 1-3, 6, and 9-11 were rejected under 35 U.S.C. §102(b) as being anticipated by Ni et al., US Patent 6,388,383.

The Examiner alleges on page 3 of the “Detailed Action” that Ni et al. discloses:

“a segregation wall part 34 having a portion made of quartz ceramic [*sic*] material opposite to the etch chamber that is a ceiling wall of the etch chamber, and having a portion made of quartz material opposite to the plasma chamber...”

Similar to Hama et al. and the Applicants’ background disclosure, Ni et al. discloses that a base 34 is made of a single dielectric material, e.g., quartz. Column 2, lines 56 - 58.

Ni et al. fails to teach an inductive coupling plasma etching apparatus having “a segregation wall part having a portion made of ceramic material opposite to the etch chamber, and having a portion made of quartz material opposite to the plasma chamber;” therefore, claim 1 and claims 2-3, which

depend on base claim 1, define over Ni et al. In addition, independent claims claim 6, claim 9, and dependent claims 10-11, which depend on base claim 9, define over Ni et al., because independent claims 6 and 9 also recite a segregation wall having both quartz material and ceramic material portions.

Claims 1-2 were rejected under 35 U.S.C. §102(b) as being anticipated by Collison et al, US Patent 6,203,657.

The Examiner alleges on page 3 of the “Detailed Action” that Collison et al. discloses:

“a segregation wall part 206 having a portion made of quartz ceramic [*sic*] material opposite to the etch chamber that is a ceiling wall of the etch chamber, and having a portion made of quartz material opposite to the plasma chamber...”

However, Collison et al. discloses that the plasma containment plate 206 is grounded to attract charged species. Column 6, lines 54 – 57. A material that is grounded means that the material must be *necessarily conductive*. Therefore, Collison et al. fails to teach an inductive coupling plasma etching apparatus having “a segregation wall part having a portion made of ceramic material opposite to the etch chamber, and having a portion made of quartz material opposite to the plasma chamber;” therefore, claim 1 and claim 2 define over Collison et al.

Claim Rejections - 35 USC § 103(a)

Claims 3, 6, and 9-11 were rejected under 35 U.S.C. §103(a) as being unpatentable over Hama et al; Claims 3, 6, and 9-11 were rejected under 35 U.S.C. §103(a) as being unpatentable over Collison et al; claim 4 was rejected

under 35 U.S.C. §103(a) as being unpatentable over Collison et al in view of Li et al; Claims 7 and 12 were rejected under 35 U.S.C. §103(a) as being unpatentable over Collison et al in view of Li et al; and Claims 1-3, 5-6, and 8-11, and 13 were rejected under 35 U.S.C. §103(a) as being unpatentable over Yin et al. in view of Collision et al.

The Applicants respectfully traverse the rejection under 35 U.S.C. 103(a) for at least the same reasons as discussed above in connection with the rejection under §102(b) by the Examiner to reject the present claims.

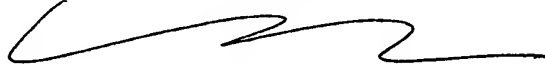
For at least the reasons stated above, Applicants content that claims 1-13 define over Hama et al. and Collison et al., taken individually or in combination with the remaining references of record.

Conclusion

No other issues are remaining, reconsideration and favorable action upon claims 1-13 now present in the application are requested.

Respectfully submitted,

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